# Hypertension Admission Rate Technical Specifications

Prevention Quality Indicators #7 (PQI #7)

AHRQ Quality Indicators<sup>™</sup>, Version 4.5, May 2013 Area-Level Indicator

Type of Score: Rate

# **Description**

Admissions with a principal diagnosis of hypertension per 100,000 population, ages 18 years and older. Excludes kidney disease combined with dialysis access procedure admissions, cardiac procedure admissions, obstetric admissions, and transfers from other institutions.

[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100, 000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population.]

# **Numerator**

Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for hypertension.

[NOTE: By definition, discharges with a principal diagnosis of hypertension are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ  $QI^{TM}$  software does not explicitly exclude obstetric cases.]

## **ICD-9-CM** Hypertension diagnosis codes:

4010	MALIGNANT HYPERTENSION	40310	BEN HY KID W CR KID I-IV
4019	HYPERTENSION NOS	40390	HY KID NOS W CR KID I-IV
40200	MAL HYP HT DIS W/O HF	40400	MAL HY HT/KD I-IV W/O HF
40210	BENIGN HYP HT DIS W/O HF	40410	BEN HY HT/KD I-IV W/O HF
40290	HYP HRT DIS NOS W/O HF	40490	HY HT/KD NOS I-IV W/O HF
40300	MAL HY KID W CR KID I-IV		

#### Exclude cases:

- with any-listed ICD-9-CM procedure codes for cardiac procedure
- with any-listed ICD-9-CM diagnosis codes of Stage I-IV kidney disease, only if accompanied by any-listed ICD-9-CM procedure codes for dialysis access
- transfer from a hospital (different facility)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- transfer from another health care facility

• with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

See Prevention Quality Indicators Appendices:

- Appendix A Admission Codes for Transfers
- Appendix B Cardiac Procedure Codes

## ICD-9-CM Stage I-IV kidney disease diagnosis codes:

40300	MAL HY KID W CR KID I-IV	40400	MAL HY HT/KD I-IV W/O HF
40310	BEN HY KID W CR KID I-IV	40410	BEN HY HT/KD I-IV W/O HF
40390	HY KID NOS W CR KID I-IV	40490	HY HT/KD NOS I-IV W/O HF

## **ICD-9-CM** Dialysis access procedure codes:

			DEL 401 / DEL 1 DI 41 1 / 010 01 II II I
3895	VEN CATH RENAL DIALYSIS	3943	REMOV REN DIALYSIS SHUNT
3927	DIALYSIS ARTERIOVENOSTOM	3993	INSERT VES-TO-VES CANNUL
3929	VASC SHUNT & BYPASS NEC	3994	REPLAC VES-TO-VES CANNUL
3042	REVIS RENIDIAL VSIS SHLINT		

# **Denominator**

Population ages 18 years and older in metropolitan area<sup>†</sup> or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

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<sup>&</sup>lt;sup>†</sup> The term "metropolitan area" (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs) and primary metropolitan statistical areas (PMSAs). In addition, "area" could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.